STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner

Dannel P. Malloy
Governor

Nancy Wyman
Lt. Governor

Healthcare Quality And Safety Branch

November 1, 2018

Mr. James Shmerling, Administrator
Connecticut Childrens Medical Center
282 Washington Street
Hartford, CT 06106

Dear Mr. Shmerling:

An unannounced visit was made to Connecticut Childrens Medical Center on August 30, 2018 by a representative of the Facility Licensing and Investigations Section of the Department of Public Health for the purpose of conducting an investigation with additional information received through September 21, 2018.

Attached is the violation of the Regulations of Connecticut State Agencies and/or General Statutes of Connecticut which was noted during the course of the visit.

In accordance with Connecticut General Statutes, section 19a-496, upon a finding of noncompliance with such statutes or regulations, the Department shall issue a written notice of noncompliance to the institution. Not later than ten days after such institution receives a notice of noncompliance, the institution shall submit a plan of correction to the Department in response to the items of noncompliance identified in such notice.

The plan of correction is to be submitted to the Department by November 15, 2018.

The plan of correction shall include:

(1) The measures that the institution intends to implement or systemic changes that the institution intends to make to prevent a recurrence of each identified issue of noncompliance;

(2) the date each such corrective measure or change by the institution is effective;

(3) the institution's plan to monitor its quality assessment and performance improvement functions to ensure that the corrective measure or systemic change is sustained; and

(4) the title of the institution's staff member that is responsible for ensuring the institution's compliance with its plan of correction.

The plan of correction shall be deemed to be the institution's representation of compliance with the identified state statutes or regulations identified in the department's notice of noncompliance. Any institution that fails to submit a plan of correction may be subject to disciplinary action.

You may wish to dispute the violations and you may be provided with the opportunity to be heard. If the

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THE FOLLOWING VIOLATIONS OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES AND/OR CONNECTICUT GENERAL STATUTES WERE IDENTIFIED

violations are not responded to by **November 15, 2018** or if a request for a meeting is not made by the stipulated date, the violations shall be deemed admitted.

We do not anticipate making any practitioner referrals at this time.

If there are any questions, please do not hesitate to contact this office at (860) 509-7400.

Respectfully,

Susan Newton, RN, BS
Supervising Nurse Consultant
Facility Licensing and Investigations Section

SN/LAD:jf

Complaint #23695

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The following is a violation of the Regulations of Connecticut State Agencies Section 19-13-D3 (b) Administration (2) and/or (c) Medical Staff (2) and/or (e) Nursing Services (1).

1. Based on clinical record review and interview for 1 (P #1) of 3 patients treated during a cardio-pulmonary emergency the hospital failed to ensure the patient received the appropriate dose of an emergency medication. The findings include:

    a. P#1 (Pediatric) arrived in the Emergency Department (ED) on 6/29/18 via Emergency Medical Services (EMS) after reported seizure activity at home. P#1's history included Down syndrome and post Atria Ventral (AV) canal defect repair in 2008. Upon arrival P#1 was noted to be actively seizing and immediately became unresponsive and not breathing with a heart rate less than 40. Full resuscitation was initiated including cardiopulmonary resuscitation (CPR), advanced airway insertion and epinephrine (adrenalin) administration via intraosseous route (IO) access due to the inability to establish a peripheral intravenous (IV) line. P#1 was resuscitated for 40 minutes and received a total of 7 doses of epinephrine without return of circulation. Telemetry monitor identified no shockable rhythm, CPR was discontinued and P#1 expired. According to dosage information identified in the Hospital's Emergency Department reference card, based on P#1's weight of 46 kilograms, P#1 should have received 0.46 mg. of Epinephrine with a calculated dose of 4.6 ml. However according to medical record documentation P#1 received 0.46 ml. of Epinephrine per dose instead of 4.6 ml. Facility documentation indicated during review of the code it was discovered that the calculated dose of epinephrine was incorrect and P#1 received under dosing of the epinephrine.

    According to the Medical Examiners (ME) report dated 6/30/18 final anatomic diagnoses included (1) coronary artery vasculitis, acute, subacute and remote myocardial infarction, recent seizure activity, pulmonary congestion and edema (2) cardiomegaly and dilation and (3) chronic bronchitis. Cause of death was identified and coronary artery vasculitis with myocardial infarction and manner of death was identified as natural.

    During an Interview with Registered Nurse (RN) #2 on 9/21/18 at 12:00 PM he/she indicated when the code was initiated RN#3 asked RN#2 to be the second medication nurse. RN#3 was at the emergency Medication box and asked for the Code Book which identified the appropriate dose of emergency medications based on weight. There were usually two code books in the room however at the time of the code the books could not be located therefore the Emergency Department (ED) pocket reference card, was used as backup. RN#2 indicated the verification that the code books are present in the room is done every shift however in this case the room had been used recently for a Code and contents had not been verified. According to RN#2 he/she did a double check on the Epinephrine dose and indicated he/she had calculated 4.6 ml and RN#3 had calculated 0.46 ml. RN#2 and RN#3 asked RN#1 who was at the bedside, to verify the dose and he/she indicated 4.6 ml seemed to be too much although he/she was not positive. Upon surveyor inquiry RN#2 indicated the lesser dose of 0.46 ml. had been administered.

    During an interview with RN#3 on 9/21/18 at 11:00 AM he/she indicated once P#1's weight was

identified he/she started preparing medications including epinephrine. RN#3 indicated RN#2 was assisting in medication verification and could not find the 2 code books in the room therefor they used the ED pocket reference card, which identified 2 concentrations of epinephrine. RN#1 was asked to verify the dose at which time the dosage was still uncertain. RN#3 indicated he/she asked MD#1 to clarify the dose and MD#1 called out the dose and milligrams and/or milliliters was not clarified. RN#3 indicated he/she drew up 0.46 ml and should have drawn up 4.6 ml.

During an interview with Medical Doctor (MD) #1 on 9/21/18 at 10:00 AM, MD#1 indicated he/she could not determine the outcome would have been different had P#1 received the higher dose Epinephrine however the ME findings suggested higher dose Epinephrine would not have made a difference in the outcome.

Hospital Code Blue-Medical Emergency Management policy indicated the credentialed practitioner who orders medications and the Registered Nurses (RN) who administers the medications during the resuscitation will review the Resuscitation Code Sheet (Code Cart Notebook) for accuracy of medications administered.